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APPLICATION

FOR

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TITLE: HOLLOW DUMBBELL

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HOLLOW DUMBBELL

BACKGROUND OF THE INVENTION

1. Field of the Invention

This invention relates to a hollow dumbbell, more particularly to a hollow dumbbell adapted to be filled with liquid for increasing weight.

2. Description of the Related Art

Referring to Fig. 1, a conventional dumbbell 1 is shown to include a handle portion 11 and two weight portions 12 which are formed in one piece of cast metal. The dumbbell 1 is hard and rigid and may cause injuries if it slips off and falls and hits a user's feet or body.

Therefore, as shown in Fig. 2, another conventional dumbbell 2 is proposed, which is molded from a flexible plastic material. The dumbbell 2 includes a handle 21 and two weight portions 22, with an accommodation space defined therein for receiving liquid, such as water, so as to increase the weight of the dumbbell 2. An access hole 222 is formed in one of the weight portions 22 to provide access to the accommodation space. A plug 223 is inserted detachably in the access hole 222 to close the access hole 222. Each of the weight portions 22 has a foldable outer wall 221 such that the dimension of the accommodation space of the weight portions 22 is changeable so as to adjust the weight of the dumbbell 2. However, as the conventional dumbbell 2 has a monotonous appearance, it is boring to perform exercises using the dumbbell 2.

SUMMARY OF THE INVENTION

The object of the present invention is to provide a hollow dumbbell which can be used under poor ambient light conditions and which has an appealing appearance.

According to this invention, the hollow dumbbell includes right and left shells which are spaced apart from each other along a longitudinal axis, and which respectively define accommodation chambers therein adapted for containing liquid to increase weight of the dumbbell. A hollow neck member is elongated along the longitudinal axis, and interconnects the right and left shells. The neck member has a cross-section which is smaller than that of each of the right and left shells, and is adapted to be gripped by hand. The neck member defines a passage therein which extends along the longitudinal axis and which has two ends that are in fluid communication with the accommodation chambers, respectively. One of the right and left shells and the neck member is formed with an access port that provides access to a respective one of the accommodation chambers and the passage. A plug member is detachably inserted into the access port to close the access port. A light-related brightening member is disposed in one of the right and left shells and the neck member.

BRIEF DESCRIPTION OF THE DRAWINGS

Other features and advantages of the present invention will become apparent in the following detailed description of the preferred embodiments of the invention, with

reference to the accompanying drawings, in which:

Fig. 1 is a perspective view of a conventional dumbbell;

Fig. 2 is an exploded perspective view of another conventional dumbbell;

Fig. 3 is an exploded perspective view of the first preferred embodiment of a hollow dumbbell according to this invention;

Fig. 4 is a fragmentary sectional view of the first preferred embodiment;

Fig. 5 is a schematic view of the first preferred embodiment in a state of use;

Fig. 6 is a fragmentary sectional view of the second preferred embodiment of a hollow dumbbell according to this invention;

Fig. 7 is a fragmentary sectional view of the third preferred embodiment of a hollow dumbbell according to this invention; and

Fig. 8 is a fragmentary sectional view of the fourth preferred embodiment of a hollow dumbbell according to this invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

Before the present invention is described in greater detail, it should be noted that same reference numerals have been used to denote like elements throughout the specification.

Referring to Figs. 3 to 5, the first preferred embodiment of a hollow dumbbell 3 according to the present invention

is shown to comprise right and left shells 5 which are spaced apart from each other along a longitudinal axis, a hollow neck member 4 which is elongated along the longitudinal axis and which interconnects the right and left shells 5, a plug member 52, and a light-related brightening member.

The right and left shells 5 and the hollow neck member 4 are molded into a one-piece construction from a transparent plastic material. Preferably, the transparent plastic material has incorporated therein a fluorescent substance. Each of the right and left shells 5 defines an accommodation chamber 30 therein so as to be adapted for containing liquid, such as water 8, in order to increase the weight of the dumbbell 3. The neck member 4 has a cross-section which is smaller than that of each of the right and left shells 5 so as to be gripped by hand, and defines a passage 301 therein which extends along the longitudinal axis, and which has two ends that are in fluid communication with the accommodation chambers, respectively. An access port in form of an inlet 51 and is formed in the right shell 5 to provide access to the accommodation chamber 30 of the right shell 5 such that water 8 can be introduced into the accommodation chambers 30 and the passage 301 through the inlet 51.

The plug member 52 is detachably inserted into the inlet 51 so as to close the inlet 51. Particularly, the plug member 52 includes a threaded shank 521 which passes through an O-ring 7 and which engages threadedly an internally

threaded surface 511 of the inlet 51 so as to prevent leakage of the water 8, and a rotary knob 522 for rotating the plug member 52.

A recess 41 is formed in an outer wall 42 of the neck member 4 which surrounds the longitudinal axis, extends inwardly towards the passage 301, and is elongated along the longitudinal axis. The light-related brightening member includes a battery-powered lighting body 6 which is received in the recess 41. The battery-powered lighting body 6 includes two illuminating portions 61 and a control switch 62 connected electrically to the illuminating portions 61. Alternatively, the brightening member may include a fluorescent bar which is made from a fluorescent material and which does not require a battery.

In use, the brightening member 6 is first inserted into the recess 41 for illumination. Then, the accommodation chambers 30 and the passage 301 are filled with water 8 introduced through the inlet 51 so that the brightening member 6 is retained in the recess 41 steadily. If desired, a plurality of fluorescent bodies 81, such as fluorescent pellets or flakes, can be disposed in the accommodation chambers 30 and the passage 301 to mix with the water 8. Finally, the plug member 52 is inserted into the inlet 51 to close the inlet 51. Referring to Fig. 5, a flexible hook-and-loop strap 9 may be fastened around the neck member 4 to increase the frictional force so as to facilitate gripping.

When the dumbbell 3 of this invention is used in a relatively dark place, due to the presence of the brightening member, i.e. the battery-powered lighting body 6 or the fluorescent bar and the fluorescent flakes 81, the dumbbell 3 is illuminated so that the pattern of movement of the dumbbell 3 can be identified, thereby enhancing the fun of exercising using the dumbbell 3.

Moreover, since the right and left shells 5 and the neck member 4 are made from a flexible plastic material with an appropriate flexibility, the dumbbell 3 can be conveniently carried and stored. Besides, as water is readily available for filling the dumbbell 3, the dumbbell 3 can be used in almost any place. Furthermore, the overall weight of the dumbbell 3 can be varied to suit a variety of users by varying the amount of water introduced into the dumbbell 3.

Referring to Fig. 6, the second preferred embodiment of a dumbbell is shown to be similar to the first embodiment in construction, except that a plurality of battery-powered bodies or fluorescent bars 6' are received in a plurality of recesses 53 that are formed in outer walls of the right and left shells 5 which surround the longitudinal axis.

Referring to Fig. 7, the third preferred embodiment of a dumbbell is shown to be similar to the second embodiment in construction, except that the outer wall 42 of the neck member 4 is thicker than the outer wall of the neck member in the second embodiment so that the passage 301 is

comparatively narrow, thereby increasing the rigidity of the neck member 4. As such, the outer wall 42 of the neck member 4 in this embodiment may be formed with a rough gripped surface for massaging the user's hand during exercising. In addition, the access port includes right and left inlets 32 which are formed in the outer wall 42 of the neck member 4 and which are respectively communicated with the passage 301 respectively such that the liquid 8 can be introduced into the passage 301 through the right and left inlets 32. The plug member includes two plugs 100, which are disposed to pass through two O-rings 110, respectively, and to engage threadedly the right and left inlets 32, respectively. Note that one of the plugs 100 may be disposed to block the passage 301 such that the accommodation chambers 30 of the right and left shells 5 are not communicated with each other and are respectively filled with the liquid 8.

Referring to Fig. 8, the fourth preferred embodiment of a dumbbell is similar to the third embodiment, except that a barrier portion 31 is formed integrally with the outer wall 42 of the neck member 4. The carrier portion 31 extends in radial directions relative to the longitudinal axis to be disposed in the passage 301 between the ends to block the passage 301 so as to divide the passage 301 into right and left passageways 302,303 that are in fluid communication with the accommodation chambers 30 of the right and left shells 5, respectively. As such, the

right and left inlets 32 are in fluid communication with the right and left passageways 302,303, respectively.

While the present invention has been described in connection with what is considered the most practical and preferred embodiments, it is understood that this invention is not limited to the disclosed embodiments but is intended to cover various arrangements included within the spirit and scope of the broadest interpretations and equivalent arrangements.